

SUSTAINABLE BUSINESS MODELS IN ENHANCING REGIONAL PRODUCT COMPETITIVENESS

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Abstract: *The study analyzes the problem of implementing the green economy to improve the regional level of product competitiveness and examines business models for achieving sustainable development. When analyzing modern business models, a model of a “green” economy is proposed that allows resource efficiency in the economic space of the region. The activity of an enterprise planning the implementation of a green economy model is considered, and it focuses on certain areas of action that can increase the level of competitiveness of its products. The study analyzes areas of resource optimization, one of which is the existence of common pool resources. Citizens of different countries were surveyed on their attitudes toward common pool resources’ state and quality. It is concluded that there are not enough resources to finance the green sector, and there is a problem with monitoring the common-pool resources. At the same time, most respondents wish to privately own common-pool resources, which indicates the particularities of national culture, distrust of government, and efficient use of resources in private ownership, namely the desire to serve certain enterprises alone or their households to obtain individual utility rather than optimize the available resources. It concluded that it is necessary to develop environmental awareness and responsibility in the population, which can positively affect the regional level of competitiveness of products and increase the level of education of citizens, to adopt non-formal education in the country, optimize all existing systems that would be based on innovations, and reduce the negative environmental footprint.*

Keywords: *competitiveness, green economy, common-pool resources, optimization of resources, environmental impact.*

JEL Classification: *E42, F36, G15, O31.*

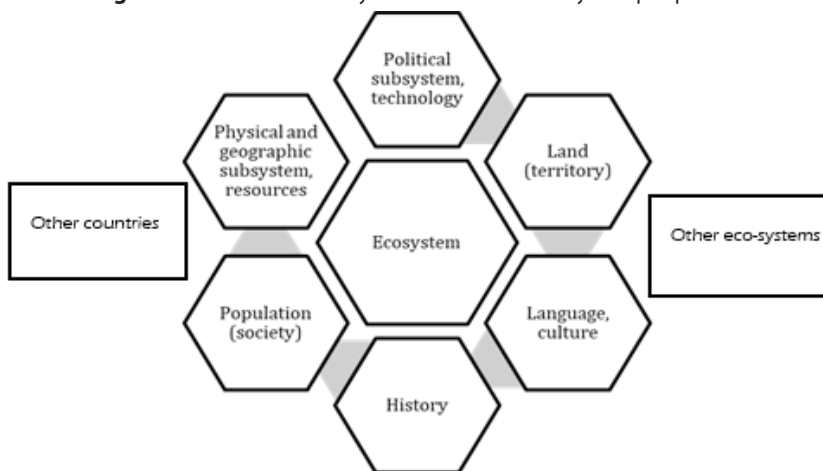
INTRODUCTION

When shifting to an eco-friendly economic system, we can see the role of changing assessments of economic activities and processes taking place in a particular system environment. One of the performance indicators is the level of competitiveness, which reflects the state of this enterprise in relation to other similar enterprises. At the global level, there is also the activity of economic complexes in different countries, which have certain developments and features and specialize in the production in this market segment. Constant digitalization, technological development, and cumulative anthropogenic impact make this study relevant and necessary due to the establishment of another economic system focused not only on profit but also on additional (sometimes primary) target functions (Matthess & Kunkel, 2020). In recent decades, the significance and capacity of many economic indicators have changed, and the world is on the way to establishing new systems with a different basis and substantially different from those of the twentieth century.

One of the stages in establishing the current economic system was the realization of its consistency and anthropogenic impact on the environment. The constant negative impact of numerous human factors has created ecological and health problems, leading to technological changes and the restructuring of existing systems. At the same time, the availability of the Internet, mobile electronic devices, and access to information made a wide range of scientists and opinion leaders realize the problems. As economic growth is important for any country, it should take place along with the growth of its competitiveness on the world market of goods, improving its living standards, increasing the comfortable coexistence of species, and encouraging social development. Each community can be considered an ecosystem functioning together with other systems and having mutual influence. Thus, we have an ordinary system consisting of subsystems, elements, and interrelations.

Fig. 1 shows that each element of this system affects the other, and the constant external impact determines trends and areas of development in each community (region or country), which is the foundation of social development.

Figure 1. Interaction of ecosystem elements from a system perspective



Source: built by the author

Therefore, regional development should be considered an element of global growth, where each enterprise affects the ecosystem and macroeconomic indicators. When setting trends in industry regions, a situation has arisen where global trends affect further development and are accompanied by growing environmental problems. Still, habits and traditional inclinations are the priorities and are often at odds with innovative products. These particularities of mentality are still the main problem in overcoming corruption, which is the most significant barrier to growth. Despite this fact, many developing countries are adopting the green economy as a promising area of economic system change based on considering the environmental footprint of human activities.

The goal of changing the existing economic system:

- Sustainable management of the economy, stabilization of the ecological and economic environment.
- Resource conservation.
- Reduction of anthropogenic load on the ecosystem.
- Creation of comfortable habitat for human beings and other biological species.
- Development of sustainable production and adoption of innovative technologies.
- Adjustment of products consumption, change in consumer habits towards environmental friendliness.
- Support for innovative entrepreneurship.
- Development of science and science-related life spheres.
- Improvement of public health.
- Transparency of data and consequences of human activities.
- Creation of the eco-friendly infrastructure.
- Waste minimization.
- Eco-friendly construction and rational use of all available resources.
- Increased income and employment of the population.

Along with the goal of introducing a green economic system, there are other benchmarks that have changed human life and are already implemented in developed countries where the population's primary needs are met. In other words, the direction of changes in the adoption of the green economy is toward accumulating the natural potential of the country, balancing renewable resource flows, optimizing production and consumption in order to efficiently use the natural potential, and constantly controlling compliance with the established norms and laws.

Key principles of the green economy include the following features:

- Minimizing waste and getting closer to the Zero waste concept.
- Creating opportunities for environmental improvement, particularly using business and technology.
- Development of human capital, environmental education, responsibility, social justice.
- Democratic corporate governance, electronic registers, public availability of information.
- Formalization, compliance with standards and own desire to improve environmental efficiency.

Changes in production toward environmental friendliness are accompanied by changes in all subsystems, while basic industry norms will become common in everyday life. Green transformation is considered a complex process of benchmark changing that will last at least 5 years and can be implemented with financial resources and new business models that differ from outdated, familiar practices (Cardeal et al., 2020).

At the same time, the innovative scenario can create additional competitive advantages for goods and the country as a whole, increase interest in environmental areas, and become the impetus for new areas such as ecotourism, the services sector, and scientific research. Progressive changes in the market environment are also desirable in terms of the sale of goods, as packaging materials will be reduced, new logistics chains will be created, and technology will change, which can significantly improve the profitability of product sales.

The dynamism of the market will be the foundation for the creation of new principles of management and the maximum involvement of the Internet, which in terms of advertising is more eco-friendly than the creation of other advertising material. Science-intensive technology can stimulate the development of science, improve the quality of learning, and raise the level of public education, reducing additional risks to society. Partnerships and changing access to data will contribute to the adoption of green technology. Therefore, it is necessary to assess resource potential regarding the possibilities for implementing the green economy at the regional level and create a map of mutual assistance where business, society, and government will create a unified system that will facilitate the shift from resource-based to eco-friendly nature management (Kostetska et al., 2018). It will lead to the creation of closed product life cycles and help to quickly combine industries, analyze competitors, and look for alternatives (Andreoni & Chang, 2019).

LITERATURE OVERVIEW

A sustainable society is the goal of many countries, and its creation continues for quite a long time due to the complexity of data and the analysis of many factors. However, it is possible due to integrating small components into large programs that would be supported everywhere (Jabbour et al., 2019). As scientists note, many innovative business models are built on the economy's digitisation and create an innovative business model, a symbiosis of technology and system sustainability (Vaska et al., 2021). Highly integrated organization is characterized by reduced participation of employees in decision making and low employee satisfaction, and vice versa. (Stojanović, Jakupović, & Jugo, 2013)

Considered opportunities for a "sustainable business model" include developing value for market participants with a resource-saving approach to the use of natural, economic and social capital (Cardeal et al., 2020). Given resource constraints, the sustainability business model is actively managed to create social and economic value by balancing social, environmental and business objectives (Breuer et al., 2018).

Such as (Lee et al., 2016) believe that artificial intelligence is currently a catalyst for progress and a way to increase a product's or service's competitiveness in the market with limited capital investments. It is also noted that artificial intelligence is able to redistribute roles in the market and create innovative business models that can reduce errors and contribute to reducing product costs. However, despite investor interest

(Nigam et al., 2021), conclude that capital-intensive business models have a negative impact on project financing, i.e., investors are reluctant to invest in new technologies that carry more uncertainty and need more time to become profitable.

On the other hand, a large number of companies demonstrate the principles of ambidexterity and the development and improvement of their business models in various directions, while developing a new business model and monetizing it along with the functioning of the old one and gradually improving it to achieve system stability (Minatogawa et al., 2020).

Innovation is a multi-step process by which organizations turn new ideas into viable business models,” making it difficult to distinguish between strategic development activities and competitive innovation. Digitization allows for improved business models and the rational use of resources, creating a more sustainable environment (Saura et al., 2020). Management technologies have changed almost all spheres of activity and are now aimed at increasing productivity and reducing response time between interaction links, which forms new systems of communication with customers and reduces transaction costs (Kajanus et al., 2019).

When analyzing environmental friendliness, which is currently a trend in business, the question of implementing circulation changes arises. Donner et al. (2020) identify six types of circular business models: biogas plant, processing enterprise, ecological bioprocessing enterprise, agricultural cooperative, agropark and support structure, which differ in the way of value creation and organizational form, but are highly dependent on partnerships and their ability to respond to changing external conditions. In turn, the question remains of changing the economy to increase the regional level of competitiveness of products, especially during the crisis.

METHODOLOGY

For the process of enhancing the competitiveness of products, it is crucial to take into account such parameters as technological changes, resource constraints, structural changes, economic conditions, and administrative changes. To assess the response to consumers' changes, it is viable to use the SERVQUAL method, which is designed to determine consumers' expectations and perceptions of the service in terms of five dimensions that are believed to represent the quality of the service.

The following aspects will be important to customers of this company: reliability, awareness of employees, appearance of premises, equipment, and personnel, empathy, sensitivity, and environmental friendliness of activities. It means that the parameters of the survey should include another indicator that examines the waste from activities (environmental impact) and is one of the key indicators to be considered when developing a marketing plan.

At the meso-level (regional level), it will be characterized by the constant increase in consumption along with the improvement of living conditions for the population of the region, which is the result of constant modernization of the enterprise in accordance with the standards of the green economic system.

Technical characteristics can be analyzed using this formula (built by the author):

$$K_{TEH} = \sum_{I=1}^n V_{TEH} * K_{ZN} - V_{EC} K_{TEH} = \sum_{I=1}^n V_{TEH} * K_{ZN} - V_{EC} \quad (1)$$

Where K_{TEH} is a coefficient of technical competitiveness calculated as the sum of the coefficients of efficiency (productivity, competitiveness, which can be calculated in the cost form when creating goods) of certain changed parameters (by their number n) multiplied by the coefficient of significance of a certain changed indicator in the overall system minus the cost of bringing the ecosystem to its initial state or improving the ecosystem within the impact. As a result, we can see an adjusted indicator of technical competitiveness that takes into account the environmental footprint, which can be calculated in money equivalents by deducting the damage provided to the environment and the cost of neutralizing it. To study the complex indicator of competitiveness, we can use the formula of the ratio of the product of the analysis indicators to the price of the product or service produced (built by the author):

$$K_{com} = \frac{\text{Product } (N1, N2 \dots Nn)}{\text{Price}} = \frac{N1 * N2 * N3 * \dots * Nn}{\text{Price}} \quad (2)$$

Indicators of the product can be environmental safety, the level of production organization, working conditions, patent purity and protection, the level of market power, the technical characteristics of production, the level of potential modernization, the level of resource savings (resource efficiency), and the denominator can be the price of the product or service sold on the market.

When analyzing the results of enterprise modernization, it is possible to carry out research using the same indicators, estimating their changes before and after the introduction of innovations.

To conduct a study on a time interval, indicators are calculated for a certain period in relation to the volume of manufactured products (quantity) or by the number of services rendered for a certain period.

RESULTS AND DISCUSSION

When implementing the green economy, the markers at the local level will be improving the ecosystem of territories, increasing the use of innovations, improving public welfare, equalizing the income of the population at the level of values of developed countries, rationalizing the use of resources, and enhancing the competitiveness of goods and services produced by these settlements at the state level (Bantash, A., Koval, V., Bashynska, M., & Kozlovtseva, 2020). Positive dynamics during innovation are possible in the long term, while the choice of strategy should take into account current regional features, support the initiative, create a favorable legislative environment for changes, and increase the role of creativity and flexibility in decision making.

Thus, the adoption of the green economy can be considered as innovative technological and social changes aimed at creating environmental regulations and the possibility for assessing the environmental impact of life. Let's consider the implementation of the green economy from the perspective of improving the competitiveness of goods or services produced in the given local area. The competitiveness of an enterprise is the degree of efficiency with which it can create profits in a constantly changing environment, adapt effectively to the market by applying innovations and transparency, maximize its own potential, improve the ecosystem, and improve the life quality of the population within the impact of the enterprise. The competitive enterprise in the

long run is rational and has an advantage over other manufacturers of these products, so it is in constant demand and has trust among customers.

The implementation of the green economy can enhance competitiveness in the below-mentioned areas (Fig. 2), which is the basis for the functioning of the economic structure in the market economic system.

Figure 2. Model of changes in the main parameters of the enterprise when implementing the green economy to enhance the competitiveness



Source: built by the author

Fig. 2 shows that the circle's upper part is primarily external impact factors, while the lower part is internal factors affecting enterprise activities. When setting the goal of enhancing competitiveness by adopting the green economy and innovations, the given facets can be considered as having resource potential and as an alternative to traditional production. To improve the results, one suggests implementing the following changes:

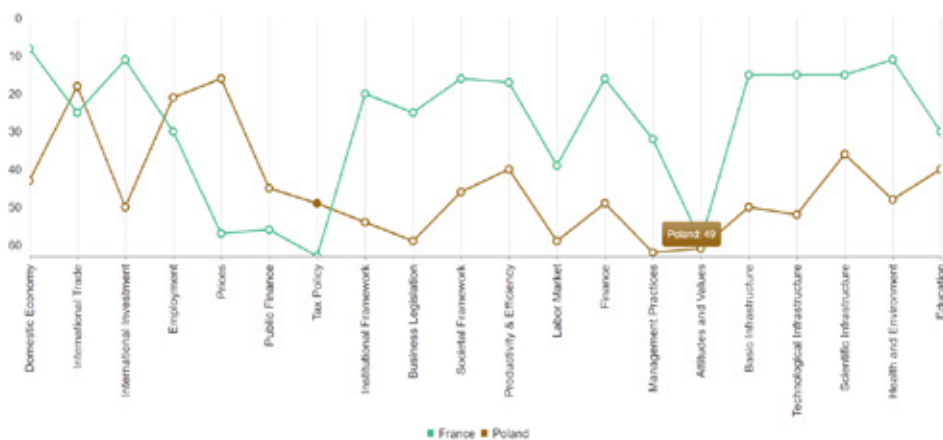
1. Market sector: enterprise adaptation in the market environment due to innovations, environmental friendliness, increasing competitiveness due to optimization and environmental friendliness, creation of new sales channels, cooperation with other enterprises, increasing demand due to trends in environmental friendliness, creation of new eco-products and services.
2. Resource sector: optimization of all available resources, use of CRM (ERP) systems, innovative algorithms, search for grants for eco-friendly production, resource planning and continuous minimization of residuals and negative impacts, manufacturability.
3. Environmental sector: constant environmental control and auditing, use of eco-technologies, cooperation with other eco-enterprises, creation of the eco-environment at the enterprise (own solar and wind power stations, use of safe materials, creation of landscape parks at the enterprise, cleaning of

- territories around the enterprise, support of eco-projects, control of biodiversity and minimization of risks.
4. Economic sector: creation of financial reserves, diversification, support for startups, calculation of economic results taking into account the environmental impact (cost of bringing the eco-environment to its original state), constant adaptation to changes in the economic environment (quick response to changes).
 5. Marketing sector: marketing strategy calculation with a focus on reduction of packaging materials, creation of advertising on social media and the Internet, flexible advertising campaign with a focus on environmental performance, trends, innovations, attracting international partners, performance planning and development of business models, the launch of new products on the market.
 6. Political sector: search for a sustainable environment for business entity activities with minimum corruption, promoting changes in the legislation and the tax code regarding activities of companies producing eco-friendly products to optimize production, promoting eco-initiatives, participation in national and international projects helping to implement the green economy, impact on the speed of decision making by establishing a council for eco-friendly business activities, creation of eco-product values.
 7. Administrative sector: development of an efficient corporate management model involving foreign stakeholders, flexibility, constant monitoring of activities, creation of activity maps, task maps, focus on innovations, constant cooperation and advanced training, creation of common development spaces for employees, social focus, creation of additional success regulators for employees and partners, optimization of working time and workload, initiative, corporate spirit and a common goal based on improving the ecosystem while creating public goods, digitalization.
 8. Science intensity: integration of the latest scientific solutions and innovations into the process of product development, cooperation with scientific institutes and institutions, encouragement of own solutions and advancements, support for startups, attraction of creative young people to practice at the enterprise, scientific partnership, digitalization, automation of processes, flexibility and commitment to constant improvement.
 9. Labor potential: creation of comfortable environment for work and achieving results based on the promotion of environmental thinking and education, decent wages (as well as by supporting innovative projects), promotion of youth development and creation of competitions, projects, events, international cooperation, creation of subsidiaries, foreign offices, representative offices, staff stability, hierarchy, discipline and fairness.
 10. Communicative sector: optimization of logistic chains, constant interaction with customers, adaptability, motivational campaigns to improve product sales for regular customers, a large number of communication channels, constant interaction with competitors, interaction with intermediaries, creation of a product distribution network among the active community, constant work with personnel, feedback, focus on environmental results and human health.

11. Motivational sector: creation of cultural events promoting eco-friendly products and innovations, participation in other events, interaction at the state level, creation of a product given ethnic and cultural features, support for cultural initiatives, active lifestyle of employees and consumers, systematic activities and innovations, development of cultural diplomacy and international partnerships (as well as by creating a reward fund for employees, partners, consumers), data transparency and creation of a model object of consumption, the worker, the consumer.

In the context of the systematic modernization of these areas, the probability of profit in the long term is higher for the enterprise than for the company that did not change the subsystems of its activities. On the other hand, developing new environmental business management methods has a positive effect if you calculate the resulting indicators in terms of environmental and economic analysis. At this stage, the main task is to adapt consumers to the pricing policy, considering the neutralization of the negative environmental footprint. A significant prospect for enhancing competitiveness is the establishment of common partnerships with other enterprises that adopt innovations and government support for environmental projects. When implementing the green economy model, the enterprise can become a market leader and enhance its competitiveness by applying technologies that are also the object of the marketing strategy and increasing the efficiency of product implementation. Adopting a green economy will be a preventive action that will stabilize territories' environmental and economic conditions. When analyzing the level of a country's competitiveness, one analyzes the indicators depicted in Fig. 3.

Fig. 3. Comparison of components of the level of competitiveness of the country by the example of France and Poland in 2022



Source: International Institute for Management Development (2022).

However, in our opinion, a manager's enterprise should focus on the environmental friendliness of the country and its goods of production, which are partially reflected in this rating (at the expense of other sub-factors of influence). When analyzing the IMD com-

petitiveness ranking, we can see that countries with a higher level of development have values tending towards 1, while developing countries have values above 50 (Table 1).

Table 1: IMD World Competitiveness Ranking by countries

Countries	2017	2018	2019	2020	2021
France	31	28	31	32	29
Poland	38	34	38	39	47
Switzerland	2	5	4	3	1
Ukraine	60	59	54	55	54

Source: International Institute for Management Development (2022).

This indicator is calculated based on 255 ranked criteria: 163 hard data points and 92 survey data points, the main of which can be seen in Fig. 3, where the weight of each influence sub-factor is about 5% on the overall competitiveness index. We analyze statistical indicators from international, national, and regional organizations, private institutions, and partner institutions. Respondents assess the competitiveness by answering the questions on a scale of 1 to 6. The average value for each economy is then calculated and converted to a scale from 0 to 10, which is then compiled into the ranking. To get the top spot for a particular sub-factor, a country should collect the best feedback on most of the aggregated and ranked values from people permanently residing in that area. Although Ukraine has improved its results over the past five years, it is still at the stage of development and, with continued international cooperation and development, can claim points close to Poland. At the same time, such countries as Switzerland, Denmark, Singapore, and Sweden remain leaders in the rating, which also indicates the regional competitiveness of their products on the market, the constant struggle for environmental production, and the gradual adoption of the green economic system. France is a country with agricultural potential comparable to Ukraine, but the indicator of competitiveness in this country is significantly lower than in Ukraine (25 points in 2021) due to France's accession to the EU, compliance with European standards, legalization and simplicity of running businesses, technological and economic development, investment attractiveness, economic stability, science development, etc. Compared to France, Poland, which borders Ukraine, has such priority areas as lower prices, the availability of a cheaper and more qualified labor force, the development of currency and securities trading, data transparency, and the tax system.

It would be desirable for developing countries like Ukraine to implement changes that will set the country's investment potential simultaneously with the modernization of standards and the tax system, which would be close to European standards. Also, to create an open, sustainable economic system that would be the next stage of development to achieve the goals of introducing innovations, improving the ecosystem, and reducing risks.

There is a situation in Ukraine where the primary needs of the population take priority over changes rather than the need to improve the quality of life due to innovations and environmental friendliness. At the same time, these indicators are important in developed countries, and their values are constantly improving due to development. At the same time, Ukraine is upgrading the basic factors affecting the competitiveness rating

of the countries and developing their basic needs. In contrast, their values in developed countries are stable and have changed insignificantly. Thus, the countries are developing such areas as ecology, investments, science, education, digitalization, safety, culture, etc.

The world has a concept: common-pool resources (CPR) optimize their usefulness in public use (CFI Education, 2022), while private possession of these resources can lead to their irrational use, manipulation, and destruction, impoverishing the potential of the country and humankind. These resources are mostly natural, subject to constant monitoring and restoration, and have a long-term interest in society. Each country has a certain percentage of common-pool resources available to the entire population and protected by the state. Our analysis, which examines 35 countries with different degrees of GDP, concludes that countries with high living standards have a higher percentage of controlled common-pool resources. In contrast, countries with low living standards have either no control over these resources or they are in private ownership.

The next step was to survey the population of: 1) Switzerland, which is the leader among highly developed countries in terms of the percentage of common pool resources; 2) Ukraine is the studied country; 3) Poland, which borders Ukraine, is a member of the EU, and has a post-Soviet history like Ukraine. 100 citizens between 18 and 40 years of age were surveyed in each country. The questionnaires involved 400 respondents who had Yes-or-No answer options. The survey results are shown in Table 2.

Table 2: Results of the survey among the population concerning the treatment of common pool resources by localization

Question	"Yes" answers for Swiss citizens	"Yes" answers for Polish citizens	"Yes" answers for Ukrainian citizens	"Yes" answers for other citizens
Do you know the concept of common pool resources? (If the answer is no, the definition was given)	87%	42%	29%	31%
Do you think there are enough common pool resources in your country?	75%	23%	4%	38%
Would you like to privately own any of the common pool resources?	8%	43%	87%	16%
Are you satisfied with the state of the common pool resources in the country?	79%	48%	5%	49%
Would you like to increase the number of common pool resources in the country?	91%	89%	96%	72%
Are you satisfied with monitoring of the state of common pool resources in the country?	64%	18%	0%	34%
Do you think it is reasonable to increase expenses for the maintenance of common pool resources in the country?	99%	86%	79%	94%
Do you think that increasing the number of common pool resources in the country can positively affect the national competitiveness?	93%	79%	92%	88%

Source: Author's calculations

Table 2 shows that the questionnaire data differs considerably among the countries. Switzerland, with a large number of public institutions constantly modernizing and maintaining common pool resources, collectively distributes financial resources for the existence of common use facilities depending on the canton, constantly holds meetings and votes to open new public spaces, has investments in this area, and has a transparent allocation of resources. Most of the population is aware of the concept and aims to increase the number of common pool resources.

In Ukraine, most of the population does not use this concept and does not think about the problem of creating and using common pool resources because of the availability of primary needs (food, health, safety, accommodation, finance, etc.). The comfort of living, aesthetics, and ecology take second place, although when analyzing the current situation, most of the population is dissatisfied with the condition and amount of common pool resources. A typical feature is the lack of people satisfied with the state of monitoring common pool resources and the desire to own some resources, which indicates the particularities of the population's mentality and distrust of the state that, according to respondents, cannot use the available resources rationally.

Common to all countries is the desire to increase the number of common pool resources, increase the cost of their maintenance, and increase awareness of the increase in the level of competitiveness of the country due to the rational use of common pool resources. What is interesting is the desire of Swiss citizens to increase expenses in this area, which is caused by the high living standards of the population, the transparency of money flow, trust in the authorities, the efficient functioning of the available common pool resources, and the desire to increase their number and modernize them, while the desire to own some resources is almost absent among Swiss citizens for several reasons. One of the reasons is saving their own resources because sharing and maintenance are cheaper than private ownership, and entrepreneurial ability is not a priority in this country. According to the survey, the situation in Poland is transitional, as the majority of the population wants to increase the number of common pool resources and improve the monitoring, maintenance, and use of existing resources. However, the analyzed indicators differ from those in Ukraine, where 95% of the population is unsatisfied with the condition and number of common pool resources.

The analysis suggests that high-income countries have more financial resources for creating and maintaining common pool resources. However, their number is still insufficient, indicating the desire of the population to improve life comfort, reserve funds for development, and non-indifference.

The data in Table 2 show that most countries desire to improve their national competitiveness. However, countries with low living standards cannot fully trust the authorities. They are focused on survival, creating better living conditions for their own use, developing private businesses, etc. Besides, this table illustrates the population's and the government's readiness to implement the green economic system to create a sustainable future for the entire ecosystem. As Ukraine is still on the path of choosing further development, it is reasonable to hold educational seminars and training sessions to increase public awareness and the need for greening.

It can be concluded that the competitiveness of products and services made in a country also depends on the level of that country's development and its reputation in the regional market. Therefore, improving the living conditions of the population,

developing environmentally-oriented legislation, and increasing the country's investment attractiveness will positively impact the country's competitiveness.

CONCLUSION

The constant negative environmental impact of human activities has caused a change in social benchmarks towards assessing the level of damage from irrational use of natural resources and the introduction of a green economic system aimed at optimizing available resources in order to improve the level of social welfare, which also contains an ecological component.

Implementing the green economy will change other systems of human existence, including the design of creating goods or services, which will build a different reality based on taking into account the environmental impacts of life and creating a sustainable environment through long-term planning. The indicator of competitiveness reflects the degree of the country's or enterprise's ability, under current market conditions, to achieve the set goals and follow the existing global trends. In this regard, the level of innovation, technology, safety, waste minimization, and efficiency of using available resources, which are the sources of competitiveness and components of the green economy, are now becoming essential components of state development. Modernization of enterprises to enhance their market competitiveness should also have environmental efficiency and automation and improve the living standards of the population, which is a necessary factor in the establishment of the green economy. Therefore, these concepts should be considered as interrelated systems affecting global processes.

There are many indicators for analyzing human activities, but only a portion contains an environmental component. So, hands with no consideration of reverse effects are not adequate to fully reflect the activities because they do not consider the negative environmental footprint and cannot adequately compare the production efficiency. When analyzing the competitiveness of states, the leaders are countries that are trying to optimize production and have developed and widely adopted the green economy, which indicates the efficiency of these changes and is recommended for developing countries. The survey among citizens of different countries revealed the necessity to increase the number of common pool resources, to conduct their regular monitoring and modernization, to increase financing of this area, and to create a branching system of goods and services for the common use to improve living standards of the population. But at the same time, Ukraine should hold educational lectures, workshops, and training to enhance the knowledge of its citizens and change the benchmarks towards adopting a green economy.

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